

Application No. 09/932,520
Docket No. 1999U021D1.US
Reply to Office Action Dated May 7, 2004

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A catalyst composition comprising an olefin polymerization catalyst and at least two different solid compounds, which solid compounds react with each other above ~~the polymerization operation~~ an onset temperature, at least one compound being an acid a carboxylic acid compound and at least one being a base carbonate or hydroxide compound to form a catalyst inhibitor that deactivates the catalyst composition; wherein the compounds do not react with each other to form a polymerization catalyst inhibitor below an onset temperature, the onset temperature being greater than 5°C above the polymerization temperature in a polymerization reactor in which the catalyst composition is used, the polymerization temperature being in the range of from 50°C to 120°C.
2. (Cancelled)
3. (Cancelled)
4. (Original) The catalyst composition of claim 1 wherein the polymerization catalyst is supported.
5. (Previously presented) The catalyst composition of claim 1 wherein both of the two different compounds have a weight loss of less than 20 weight percent measured using thermogravimetric analysis at 80° C for 20 minutes.

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6. (Original) The catalyst composition of claim 1 at least one of the two different compounds has a dielectric constant greater than 2.
7. (Previously presented) The catalyst composition of claim 1 wherein the catalyst is at least one early transition metal metallocene.
8. (Cancelled)
9. (Cancelled)
10. (Original) The catalyst composition of claim 1 wherein the catalyst inhibitor comprises carbon dioxide.
11. (Cancelled)
12. (Cancelled)
13. (Original) The catalyst composition of claim 1 wherein the mole ratio of the at least one acid compound and the at least one base compound is in the range of from 20 to 0.05.
14. (Cancelled)
- 15-34 (Cancelled)
- 35-37. (Cancelled)
38. (Cancelled)
39. (Cancelled)

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40-45. (Cancelled)

46. (Cancelled)

47-55. (Cancelled)

56. (New) The catalyst composition of Claim 1, wherein the carboxylic acid compound is selected from the group consisting of o-toluic acid, tropic acid, 4-octyloxybenzoic acid, 4-bromophenylacetic acid, 2-phenoxybenzoic acid, 3,4,5-triethoxybenzoic acid, 2,4-dimethoxybenzoic acid, 3-methyladipic acid, DL-malic acid, tropic acid, glutaric acid, ketoglutaric acid, pimelic acid, mandelic acid, 3-t-butyladipic acid and L-malic acid.
57. (New) The catalyst composition of Claim 1, wherein the carbonate or hydroxide compound is selected from the group consisting of potassium carbonate, calcium carbonate, sodium carbonate, barium carbonate, zinc carbonate hydroxide hydrate, magnesium carbonate hydroxide hydrate, calcium hydroxide, sodium hydroxide, magnesium hydroxide, lithium carbonate, potassium bicarbonate and aluminum hydroxide.
58. (New) The catalyst composition of Claim 1, wherein the mole ratio of carboxylic acid compound to carbonate or hydroxide compound is from 2:1 to 1:2.
59. (New) The catalyst composition of Claim 1, wherein the onset temperature is greater than 80°C.
60. (New) The catalyst composition of Claim 1, wherein the olefin polymerization catalyst, activator, carboxylic acid compound and carbonate or hydroxide compounds are dry mixed prior to injecting in a polymerization reactor.

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61. (New) The catalyst composition of Claim 1, wherein the olefin polymerization catalyst, activator, carboxylic acid compound and carbonate or hydroxide compounds form a slurry comprising mineral oil prior to being injected in a polymerization reactor.
62. (New) The catalyst composition of Claim 1, wherein the carboxylic acid compound or carbonate or hydroxide compound has a melting point greater than 70°C.